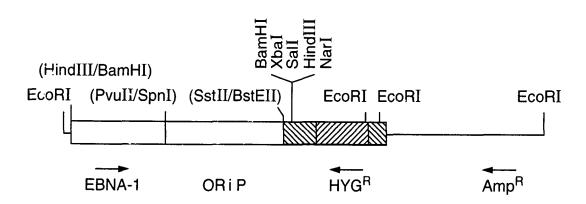
- Application No.: 09/247,054
 Title: Self-Replicating Episomal Expression Vectors Conferring
 Tissue-Specific Gene Expression
 Inventors: Michael Antoniou and Franklin G. Grosveld
 Docket No. CACO-0045
 Date of Filing: February 9, 19
 Telephone No. (215) 568-310 Date of Filing: February 9, 1999 Telephone No. (215) 568-3100

FIG.I



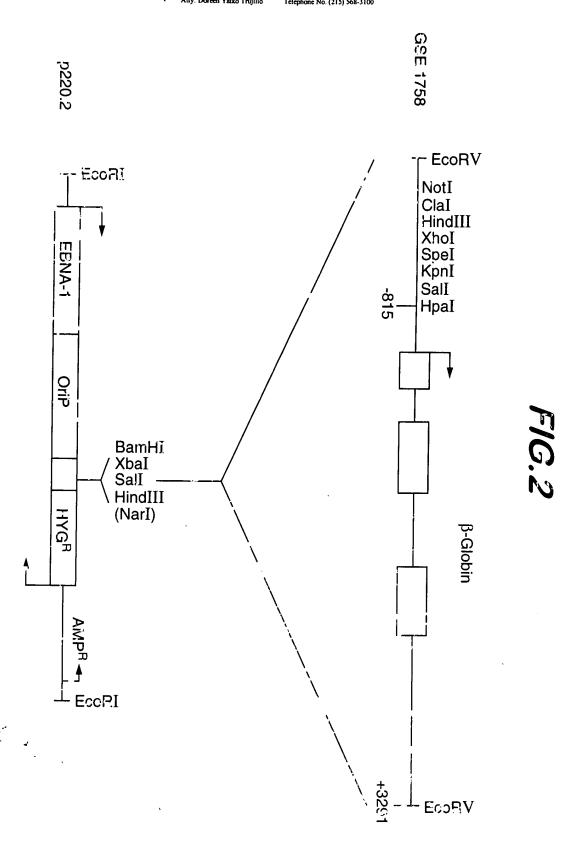
bp	
1-35	 pBR322
36-2646	EBV EBNA-1 107567-110176 (Baer et. al., Nature 310:1984) Bam HI-PvuII fragment. Bam HI site was blunt-end ligated to the HindIII site.
2647-4826	EBV OriP 7333-9516 SphI-SstII sites blunt-end ligated to the BstEII site. (Sugden et. al., MCB 5:410, 1985)
4827-5460 6488-6747	HSV TK regulatory region (McKnight, S.L., Nucleic Acids Res. 8, 5949, 1980) PvuII fragment ligated into the poisonless pBR322 at NaeI site. These sites lost in cloning.
5461-6487	HPH gene (Gritz and Davies, Gene 25:179, 1983) Ban HI fragment blunt-end ligated into the SmaI and BglII sites in HSV TK sequences.
6748-8952	 pBR322 poisonless vector (deletion of 1.1 kb in pBR322) confers ampicillin resistance. (Lusky & Botchan, Nature 293:79, 1981)

-3

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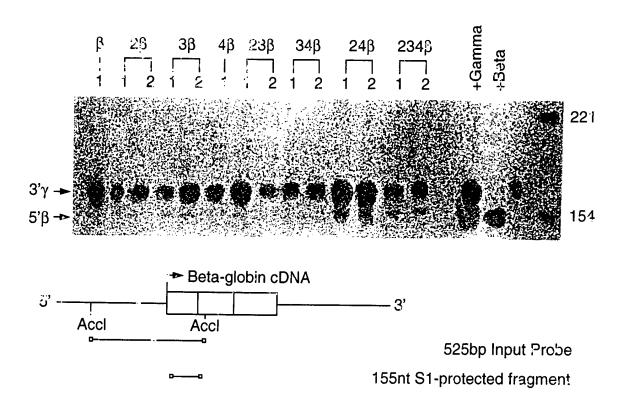
FIG.3

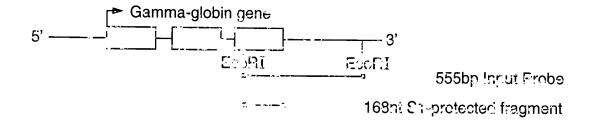
5' HC-2 - 1.5kb KpnI-E blunted fragment	3giII	<u> </u>	XbaI) (BglII)
5' HS-3 - 1.9kb HindIII fragment	Ī	(HindIII) (BamHI)	3-3
5' HS-4 - 2.1kb BamHI fragment	[-XbaI	(BamHI) 5' HS-4	(XbaI)
(Bar 5' HS-4-3-2 5.5kb construct 5' HS-3-2 3.4kb construct	5' HS-4	III) (BamHI) (BstEII) (X	HS-2
5' HS-4-3 4kb construct	(Bar		KhaI) (Figili)
5' HS-4-2 3.6kb construct	(Bar ! !		XbaI) (BgiII)

- Ar-dicatic No.: 09/247,054
 ? Ie: Sel. Peplicating Episomal Expression Vectors Conferring
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 Date of Filing: Febru Atty: Doreen Yatko Trujillo
 - Date of Filing: February 9, 1999 Telephone No. (215) 568-3100

FIG.4

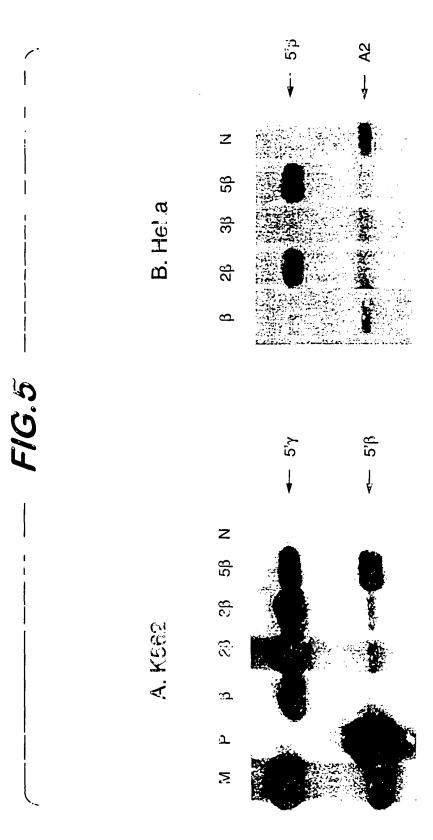
S1 analysis of K562 cells containing human β -globin on an EBV based vector





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Inventors: Michael Antoniou and Franklin G. Grosveld
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Atty: Doreen Yatko Trujillo
Telephone No. (215) 568-3100



35.

Application No.: 09/247,054
Title: Self-Replicating Episomal Expression Vectors Conferring
Tissue-Specific Gene Expression
Inventors: Michael Antoniou and Franklin G. Grosveld
Docket No. CACO-0045
Atty: Doreen Yatko Trujillo
Telephone No. (215) 568-3100

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FIG 6

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